

## BRADY B-681 HIGH PERFORMANCE PRESSURE SENSITIVE PIPE MARKER

TDS No. B-681

Effective Date: 11/15/2010

### **Description:**

Brady B-681 High Performance PSA Pipemarker is a surface printed polyester label with a polyester overlamine.

### **Details:**



### **Use:**

Brady B-681 is designed for use on stainless steel, B-120 Fiberglass, and any other surfaces for pipemarkers. B-681 is designed for use in Pulp and Paper and Petrochemical environments where excellent chemical and abrasion resistance is required. It can be used indoors and outdoors.

### **Special Properties:**

Excellent chemical resistance. Can be applied down to 0°F (-18°C).

### **Adhesive Type:**

Acrylic pressure sensitive

### **Substrate Type:**

Polyester film with a polyester overlamine

### **Standard Material Colors:**

Blue, green, red and yellow

### **Standard Legend Colors:**

White and black

### **Thickness (PSTC-33):**

Total: 0.005 in. (0.13mm)

### **Adhesive Properties:**

Adhesion to Steel (PSTC-1)

15 Minute Dwell (Avg.) -- 70 oz/in. (76 N/100mm)

Ultimate Dwell (72 Hrs.) (Avg.) -- 108 oz/in. (118 N/100mm)

Tack (ASTM D 2979) (Avg.) -- 1170 g (11 N)

Drop Shear (PSTC-7) (Avg.) -- 20 Hrs.

### **Abrasion Resistance (Method 5306 of U.S. Federal Test Method Std. No. 191A):**

CS-17 wheels, 1000 g wts.

Polyester laminate withstands up to 1000 cycles.

### **Gloss:**

120 Gardner Units

### **Minimum Application Temperature:**

0°F (-18°C)

### **Service Temperature:**

-40°F to 230°F (-40°C to 110°C)

**Average Outdoor Durability:**

5-8 years (Average expected outdoor life of product will depend on user definition of failure and climatic conditions.)

**Chemical Resistance:**

REAGENT	7 DAY IMMERSION	DIP TEST	RUB TEST
30% Sulfuric Acid	NE	NE	NE
10% Sulfuric Acid	NE	NE	NE
30% HCl	NE	NE	NE
10% HCl	NE	NE	NE
50% NaOH	F	NE	NE
10% NaOH	F	NE	NE
Methyl Ethyl Ketone	F	F	NE
Acetone	F	F	NE
1,1,1-Trichloroethane	F	F	NE
Methanol	F	NE	NE
IPA (Isopropanol)	F	NE	NE
ASTM #3 Oil	NE	NE	NE
SAE 20 Oil	NE	NE	NE
Alconox®	NE	NE	NE
Toluene	F	F	NE
Mineral Spirits	F	NE	NE
Glacial Acetic Acid	NE	NE	NE
5% Acetic Acid	NE	NE	NE
Diesel Fuel	F	NE	NE
Heptane	F	F	NE
10% Ammonia	NE	NE	NE
Kerosene	F	NE	NE
Water	NE	NE	NE
20% Sodium Carbonate	NE	NE	NE
2% Sodium Carbonate	NE	NE	NE
10% NaCl	NE	NE	NE
Bleach	NE	NE	NE

NE = No Effect

NT = Not Tested

F = Failed (affected Sample)

7 Day Immersion: Immersed in reagent for 7 days.

Dip Test: Five 10 minute dips in reagent with 30 minute recovery.

Rub Test: Rubbed sample for 1 minute with swab soaked in reagent.

Product testing, customer feedback, and history of similar products, support a customer performance expectation of at least **two years from the date of receipt** for this product as long as this product is stored in its original packaging in an environment *below 80°F (27°C) and 60% RH*. We are confident that our product will perform well beyond this time frame. However, it remains the responsibility of the user to assess the risk of using such product. We encourage customers to develop functional testing protocols that will qualify a product's fitness for use in their actual applications.

**Trademarks:**

Alconox® is a registered trademark of Alconox Co.

Signmark® is a registered trademark of Brady Worldwide, Inc.

ASTM: American Society for Testing and Materials (U.S.A.)

PSTC: Pressure Sensitive Tape Council (U.S.A.)

SAE: Society of Automotive Engineers (U.S.A.)

All S.I. Units (metric) are mathematically derived from the U.S. Conventional Units.

**Note:** All values shown are averages and should not be used for specification purposes.

Test data and test results contained in this document are for general information only and shall not be relied upon by Brady customers for designs and specifications, or be relied on as meeting specified performance criteria. Customers desiring to

develop specifications or performance criteria for specific product applications should contact Brady for further information.

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